

WCRC Minutes
May 10, 2006

Intro of members: Zeke Ward, WCRC Chairman and Mineral County Commissioner; JB Alexander, Creede; Merl Jennings, Creede; Jim Matush, Creede; Don Dustin, Creede; Les Dobson, US Forest Service; Mark Walker, CDPHE; Kelley Thompson, WCRC Director

Approval of minutes: JB mentioned a possible spelling error in April minutes, but no other corrections were proposed. Motion to approve the April minutes made by Don; second made by JB. Motion carried. Kelley will check for a spelling error.

Additions/corrections to the agenda: A discussion of fairgrounds was added to Old Business.

Reports:

Zeke – New Hampshire Trip:

Zeke talked about the EPA Collaborative Cleanups conference he attended in New Hampshire. It was a good conference, he made some good associations, and brought back good information. He added to an interesting discussion about communication between EPA programs.

Kelley - Director's Report:

At Windy Gulch, Kelley was waiting to work on the water line before finishing channel rock work. However, runoff started earlier than normal in Windy Gulch and eroded out some of the channel. Kelley spent several days placing rock by hand to stabilize things. Kelley put out a bid request for the water line, and had Gardner scheduled in April to put in 3" potable HDPE pipe. However, Clyde presented bid documents to city engineers and they sent a message saying that we had to use 6" ductile iron pipe, have the line surveyed, have easements, and have them design or at least sign off on project. We had sufficient money for the HDPE, but may not have enough money for 6" ductile iron with all the elbows, etc. So, as it really isn't our responsibility to fix the existing leak, Kelley is leaving the line in the city's hands and will try to finish with channel work. Kelley is asking the CWCB if extra money from the project could be used to work on the Commodore flume.

For the stream gage, Kelley got the high flow pipe cleaned out but the low flow pipe is plugged. Its difficult to get to the line now in high flow, so will wait to try to dig out the line in low flow. Les, JB, and Kelley planted a bunch of willow cuttings, and some of our willow and dogwood at the Outlet and Midwest mines. Kelley also planted a dozen of the peachleaf willow around the creek bend on the MCFA property. JB and Merl planted the rest of dogwood in the floodplain. Kelley has been waiting to plant the aspen at the Phoenix and Midwest until the other aspen have leafed out, and JB has recommended putting wire cages around some to limit animal damage. Kelley is thinking about planting the remaining trees the week of May 22 to 26. The committee recommended Paul Whitmore at the school, and Don may be able to contact some help.

Les, JB, and Kelley also took some water samples at Windy Gulch and Midwest mine. Windy Gulch still has fairly high dissolved zinc (1508 ppb). At the Midwest, the main seep appeared to be stratified. At the upper end, the seep was 1.9C, pH of 2.9, 1152 ppb zinc, and 21800 ppb iron. At the lower end at a lower elevation, the seep was 4C, pH 4.86, 96ppb zinc, and 162 ppb iron. Unfortunately, the seep had about 9mg/L dissolved oxygen which would probably reduce the effectiveness of an anoxic drain. Kathleen was also worried about point source and permit issues with using 319 money for the seep. So, we have decided not to try to install an anoxic drain in the seep. We can use a portion of remaining 2003 319 money to finish re-vegetation and

monitoring, and the committee thought it would be good to install interpretative signs. Any remaining money could potentially be redirected to Amethyst/Commodore project. Kelley also took samples upstream and downstream of Gormax and Park Regent mines to get a better handle on success of reclamation projects. The Gormax looks clean, but the ditch in front of the Park Regent was high in zinc.

Jim, JB, and Kelley also took samples and flow data at major stream sampling sites. Since the flood, there is a seep where the pipe fall was in front of the Commodore waste dump that was running 47 gpm. JB and Kelley worked some to clean Amethyst and Commodore grizzleys, but Kelley felt like it will be better to clean other areas after the flow goes back down; which shouldn't be long. With the potential for low water this year, it may be a good year to do projects in the Creek, and JB brought up looking for a big natural seep between the La Garita and 4UR bridges. Mark motioned and Merl seconded to have the TAC consider work to be done in the Creek so we can be ready if it does get really low. Motion passed.

Kelley mentioned that Bob Kirkham had set up a field trip with the Colorado Field Institute August 26 from 9am to 4pm. Also, Jim Erdman is moving to northern Colorado.

Old Business:

Commodore / Amethyst / Last Chance Projects

Kelley talked to Kathleen about redirecting 319 money for the Amethyst project to the Commodore stabilization. There was still the potential seep issue, but that issue became less important. After discussing ownership issues with Laurie Fisher, Kathleen said they would require a 25% match from the Poxsons or a covenant not to develop the site. If the land was transferred to the nonprofit, they wouldn't have these requirements. Zeke mentioned that the Poxsons lawyers and accountants are still looking at the transfer. Zeke recommended that we give the transfer one more month. Since the last meeting, Les got word that the Forest Service could provide \$235,000 for the Last Chance dump if we can match the money. In talking back with CDMG, Jim and Jeff still placed the Commodore work as the priority over the Amethyst project, even with the Forest Service money. They recommended seeing if the stabilization at the Commodore can serve as match for the Forest Service money. Les thinks it might work, but it is waiting to hear. We could define the project as Commodore, Amethyst, and Last Chance dump stabilization. We will wait to see if the Poxson match or nonprofit transfer goes through, and if not revisit the issue with 319 and EPA. We will schedule actual work on the Amethyst and Last Chance for summer 2007 to see what remaining money we may have.

Fairgrounds Project

Mark Arnold is working on the MCFA VCUP. Kelley learned from Dan Heffernan that the MCFA also had to produce an Analysis of Brownfields Cleanup Alternatives (ABCA). Kelley is trying to produce this document, although it looks like it has to be more extensive than the VCUP. Mark questioned if we really had to produce an ABCA and thought they hadn't at other sites. There was also some discussion about potential monitoring wells at the site. Mark mentioned that he may not require the wells for the VCUP.

New Business:

Hazwopper/MSHA Training

Don said that he and several others in the area were interested in getting the 8 hour hazwopper refresher. Kelley thought that it would cost about \$600 to have an instructor come. With the MCFA project going towards capping, we may not need to take samples at the MCFA site so it may not be worth Kelley getting his 40-hour training, but it may be nice to have someone with

training like Don available if needed. Kelley also wondered if putting on the course for equipment operators was really within the committee's mission, but maybe we should pay for Don to have a refresher in Denver in case we need him. Jim also brought up the need for a MSHA 8 hour refresher course. Kelley will look into the possibility of combining a Hozwopper and MSHA 8 hour refresher course, and the possibilities of bringing an instructor down. If it doesn't look feasible, then we may pay for a class for Don in Denver.

Bench Scale Tests / Future NT Treatment Direction

JB presented a set of graphs for the bench scale treatment tests he has been working on. JB treated Nelson Tunnel with both lime and sodium hydroxide. From concentrations in raw water of about 60000 ppb, zinc was reduced below 50 ppb at about pH 9.0 and was found as low as 7.2 ppb at pH 10. Cadmium was reduced below 2 ppb at about pH 9.7 and was below detection limits at pH 10.6. Copper was a bit anomalous and was below detection limits in samples as low as pH 7.5, but was present again in some higher pH samples. Overall, it looked like treatment with lime or sodium hydroxide could reduce metals in Nelson Tunnel water to stream standards although the computer modeling had indicated originally that it could not.

JB mentioned that as next steps we need to look at the other treatment processes, such as settling or filtration, as well as other possible technologies such as electro-coagulation, reverse osmosis, or ion exchange. We could potentially try to build a bench scale electro-coagulation unit. JB motioned and Kelley seconded to have a subcommittee of the TAC look closer at other alternative treatment methods. Motion passed.

Significant discussion also ensued about what we should really do with the Nelson Tunnel. Don brought up that we may be able to fund one big capital project, but it will be hard to fund the significant yearly O+M that will be required for treatment. He suggested that in-mountain solutions or even a direct pipe to the Rio Grande may be the most feasible options. Zeke mentioned bringing the water in the Nelson up to the Commodore 5 level to evacuate oxygen, but Jim thought that most of the contamination was already in the water where it was coming out of the Amethyst vein. The direct pipe may be an option if we can take enough other contamination out to meet the TMDL to the Rio Grande. The Nelson remains a tough issue.

The next meeting will be June 7, 2006. The meeting adjourned at 5:00 PM

Respectfully Submitted,
Kelley Thompson